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Bindu Rama Rao

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EXAMINER

DESIR, PIERRE LOUIS

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/797,176

Applicant(s)

RAO ET AL.

Examiner

Pierre-Louis Desir

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/12/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Moles et al. (Moles), US Patent No. 6615038.

Regarding claim 1, Moles discloses a mobile electronic device network employing provisioning techniques for updating electronic devices (see abstract), the network comprising: a device server capable of dispensing at least one update (i.e., mobile station configuration server) (see fig. 2, col. 6, lines 13-16); an electronic device having at least one of firmware and software (i.e., mobile station) (see fig. 2, and col. 6, lines 28-39), the electronic device being communicatively coupled to the device server (see fig. 2); and an update service in the electronic device, presence of the update service in the electronic device being determinable by the network, wherein when enabled the update service indicates to the network capability of the electronic device to update at least one of firmware and software, electronic device employing the at least one update to update the at least one of firmware and software (i.e., either during the service provisioning or at a subsequent time, mobile station configuration server 160 gathers configuration data from MS 112 and stores it in a configuration record in a database. Thereafter,

mobile station configuration server 160 may from time to time transmit mobile station updates to MS 112 to correct software defects or to add new features) (see figs 2-4, col. 6, lines 33-39).

Regarding claim 2, Moles discloses a network (see claim 1 rejection) wherein the device server is adapted to store and dispense a plurality of updates (i.e., either during the service provisioning or at a subsequent time, mobile station configuration server 160 gathers configuration data from MS 112 and stores it in a configuration record in a database) (see figs. 2-4, col. 6, lines 33-39), wherein the at least one update dispensed to the electronic device is selected from the plurality of updates based upon characteristics of the electronic device communicated to the device server (see figs. 2-4, col. 6, lines 33-39).

Regarding claim 3, Moles discloses a network (see claim 2 rejection) further comprising: number assignment module (NAM) parameters provisioned in the electronic device by the network, wherein the network is capable of administering the NAM parameters in the electronic device (i.e., service provisioning initiates an over-the-air (OTA) process that activates in the cellular handset a Number Assignment Module) (see col. 1 line 66 to col. 2, line 2); and scheduling software for at least one update of one of firmware and software in the electronic device during administration of the NAM parameters by the network (see col. 7, line 36 to col. 8, line 26).

Regarding claim 4, Moles discloses a network (see claim 3 rejection) wherein the network is capable of determining whether the electronic device supports an over-the-air provisioning function (see col. 6, lines 28-39), and wherein the electronic device is capable of executing the over-the-air provisioning function, and wherein the over-the-air provisioning

function comprises one of a firmware update function and a software update function in the electronic device (see col. 6, lines 28-44).

Regarding claim 5, Moles discloses a network (see claim 4 rejection) wherein one of the firmware update function and the software update function in the electronic device is invoked based upon one of a firmware update service option and a software update service option provided in the electronic device (i.e., during or subsequent to service provisioning for MS 112, mobile station update controller transmits a mobile station configuration request message for MS to IWF through the Internet. In response to the mobile station configuration request, MS transmits its manufacturer identification data, hardware revision number, and software revision number to mobile station update controller through IWF and Internet) (see col. 8, lines 32-40).

Regarding claim 6, Moles discloses a network (see claim 5 rejection) further comprising: an update agent in the electronic device (i.e., update controller) (see fig. 3); and a network server determining a service option and for permitting the electronic device to initiate over-the-air access to one of the firmware update service option and the software update service option in the electronic device (i.e., mobile station configuration server) (see fig. 2, col. 6, lines 13-16), wherein the network is adapted to employ the means for determining a service option to determine one of an enabled firmware update service option and an enabled software update service option in the electronic device and the network is adapted to invoke the update agent while initializing a number assignment module in the electronic device (see figs. 2-4, col. 6, lines 33-39).

Regarding claim 7, Moles discloses a network (see claim 6 rejection) wherein one of the firmware update service option and the software update service option in the electronic device is

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adapted to be set by the network without user intervention (i.e., a system for automatically creating and updating a handset configuration database in a wireless service provider's network and for performing over-the-air (OTA) updating of mobile phone handset) (see col. 1, lines 11-15), and wherein the at least one update selected from the plurality of updates is disseminated to the electronic device (see figs. 2-4, col. 6, lines 33-39), and wherein the update agent is invoked in the electronic device for updating one of firmware and software employing the at least one updates (see figs. 2-4, col. 6, lines 33-39).

Regarding claim 8, Moles discloses a network (see claim 7 rejection) further comprising: over-the-air delivery of the at least one update to the electronic device from a delivery server after determining that one of the firmware update service option and the software update service option in the electronic device is set (i.e., when an unprovisioned mobile station accesses wireless network, then BS and/or MSC, using the handset data in HLR, identifies MS as an unprovisioned handset and performs an over-the-air (OTA) service provisioning of the MS. Either during the service provisioning or at a subsequent time, mobile station configuration server gathers configuration data from MS and stores it in a configuration record in a database. Thereafter, mobile station configuration server may from time to time transmit mobile station updates to the MS to correct software defects or to add new features) (see col. 6, lines 28-39).

Regarding claim 9, Moles discloses a network (see claim 4 rejection) further comprising: one of a firmware update service function and a software update service function in the electronic device (see col. 6, lines 28-44); and a network server for facilitating network-initiated over-the-air access to one of the firmware update service option and the software update service option in the electronic device (i.e., mobile station configuration server) (see fig. 2, col. 6, lines

13-16), wherein the network initializes the number assignment module in the electronic device and, after determining that one of the firmware update service option and the software update service option in the electronic device is enabled (i.e., service provisioning initiates an over-the-air (OTA) process that activates in the cellular handset a Number Assignment Module) (see col. 1 line 66 to col. 2, line 2), initiating download of at least one update and updating one of the firmware and software of the electronic device (see col. 7, line 36 to col. 8, line 26).

Regarding claim 10, Moles discloses a network (see claim 1 rejection) wherein the electronic device comprises at least one of a plurality of mobile electronic devices (see fig. 1, and col. 5, lines 1-5), and wherein the plurality of mobile electronic devices comprise at least one of a mobile cellular phone handset, personal digital assistant, pager, MP3 player, and a digital camera (see fig. 1, and col. 5, lines 1-5).

Regarding claim 11, moles discloses a mobile electronic device network adapted to update electronic devices and perform over-the-air number assignment module parameter provisioning (see abstract), the network comprising: an electronic device comprising one of firmware and software (see fig. 2, and col. 6, lines 28-39), the electronic device also comprising number assignment module parameters (i.e., service provisioning initiates an over-the-air (OTA) process that activates in the cellular handset a Number Assignment Module) (see col. 1 line 66 to col. 2, line 2), the electronic device being communicatively coupled to at least one server (see fig. 2); and at least one of a firmware update service option and a software update service option in the electronic device determinable by the network (see col. 6, lines 28-44), wherein when enabled, the at least one of a firmware update service option and a software update service option indicates to the network that the electronic device is capable of updating one of firmware and

software (see col. 6, lines 28-44), wherein the electronic device is adapted to communicate one of the firmware update service option and software update service option to the network, and wherein the electronic device is also adapted to communicate device specifications to the network when the network attempts to provision the number assignment module parameters (i.e., when an unprovisioned mobile station accesses wireless network, then BS and/or MSC, using the handset data in HLR, identifies MS as an unprovisioned handset and performs an over-the-air (OTA) service provisioning of the MS. Either during the service provisioning or at a subsequent time, mobile station configuration server gathers configuration data from MS and stores it in a configuration record in a database. Thereafter, mobile station configuration server may from time to time transmit mobile station updates to the MS to correct software defects or to add new features) (see col. 6, lines 28-39).

Regarding claim 12, Moles discloses a network (see claim 11 rejection) wherein the at least one server dispenses at least one of a plurality of updates to the electronic device based upon one of the firmware update service option and the software update service option and device specifications communicated to the at least one server by the electronic device (i.e., an update controller for transmitting to a first mobile station a mobile station configuration request message and for receiving from the first mobile station first configuration data transmitted by the first mobile station in response to receipt of the mobile station configuration request message. The update controller stores the first configuration data in a first configuration record. Either during the service provisioning or at a subsequent time, mobile station configuration server 160 gathers configuration data from MS 112 and stores it in a configuration record in a database. Thereafter, mobile station configuration server 160 may from time to time transmit mobile



station updates to MS 112 to correct software defects or to add new features) (see abstract, and col. 6, lines 28-44).

Regarding claim 13, Moles discloses a network (see claim 11 rejection) wherein the network is adapted to manage updating at least one of firmware and software based upon one of a firmware update service option and a software update service option in the electronic device determinable by an over-the-air provisioning function in the network (see col. 6, lines 28-44).

Regarding claim 14, Moles discloses a network (see claim 13 rejection) wherein the network is adapted to determine a state of one of the firmware update service option and the software update service option in the electronic device and provision a universal resource locator in the electronic device for at least one server in the network, wherein the at least server is employed to download updates to the electronic device (i.e., after a predetermined delay or upon acknowledgment by the user of MS 112, mobile station update controller 305 may then transfer downloadable upgrade file 324 to handset MS 112 through Internet 165 and wireless network 100) (see col. 7, lines 49-60).

Regarding claim 15, Moles discloses a network (see claim 11 rejection) wherein the electronic device comprises at least one of a plurality of mobile electronic devices (see fig. 1, and col. 5, lines 1-5), and wherein the plurality of mobile electronic devices comprise at least one of a mobile cellular phone handset, personal digital assistant, pager, MP3 player, and a digital camera (see fig. 1, and col. 5, lines 1-5).

Regarding claim 16, Moles discloses a method of updating software in a wireless communication device in a wireless network (see abstract), the method comprising: determining a value of one of a firmware update service option and a software update service option in the

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wireless communication device by the wireless network (i.e., either during the service provisioning or at a subsequent time, mobile station configuration server 160 gathers configuration data from MS 112 and stores it in a configuration record in a database) (see col. 6, lines 28-44); and downloading an update from a server in the wireless network if one of the firmware update service option and the software update service option is determined to have a predetermined value (i.e., after a predetermined delay or upon acknowledgment by the user of MS 112, mobile station update controller 305 may then transfer downloadable upgrade file 324 to handset MS 112 through Internet 165 and wireless network 100) (see col. 7, lines 49-60).

Regarding claim 17, Moles discloses a method (see claim 16 rejection) wherein determining is performed during an over-the-air parameter administration operation for programming number assignment module parameters (i.e., when an unprovisioned mobile station accesses wireless network, then BS and/or MSC, using the handset data in HLR, identifies MS as an unprovisioned handset and performs an over-the-air (OTA) service provisioning of the MS) (see col. 6, lines 28-39).

Regarding claim 18, Moles discloses a method (see claim 17 rejection) wherein the over-the-air parameter administration operation comprises: paging one of a firmware update service option number and a software update service option number in the wireless communication device (i.e., mobile station update controller transmits a mobile station configuration request message) (see fig. 4, col. 8, lines 27-59); verifying an identity of the wireless communication device using at least one authentication process (see fig. 4, col. 1, line 66 to col. 2, line 13); and responding to the paging, if the wireless communication device is capable of supporting the over-the-air parameter administration operation (see fig. 4, col. 8, lines 29-40).

Regarding claim 19, Moles discloses a method (see claim 18 rejection) wherein responding to the paging further comprises: indicating support for one of the firmware update service option and the software update service option by sending one of a firmware update service option number and a software update service option number, if the wireless communication device supports one of the firmware update service option and the software update service option (i.e., in response to the mobile station configuration request, MS 112 transmits its manufacturer identification data, hardware revision number, and software revision number to mobile station update controller 305 through IWF 150 and Internet) (see col. 8, lines 36-40); and indicating lack of support for one of the firmware update service option and the software update service option, if the wireless communication device does not support one of the firmware update service option and the software update service option (i.e., in response to the mobile station configuration request, MS 112 transmits its manufacturer identification data, hardware revision number, and software revision number to mobile station update controller 305 through IWF 150 and Internet 165. As mobile station update controller 305 receives configuration data from MS 112, mobile station update controller 305 stores the incoming manufacturer identification data, hardware revision number, and software revision number in manufacturer identification code 321, hardware revision number 322, and software revision number 323, respectively. Spontaneously, or in response to a mobile station upgrade request message, mobile station update controller 305 receives mobile station upgrade files for MS 112 from the MS 112 manufacturer. Mobile station update controller stores the incoming mobile station upgrade files in downloadable upgrade file 324. Next, mobile station update controller 305 transmits downloadable upgrade file 324 to MS 112 and updates software revision number

323 in MS 112 Parameters to reflect the revision number associated with the transferred downloadable upgrade file 324. In an alternate embodiment, mobile station update controller 305 may transfer a software upgrade alert message to MS 112. In response to authorization from MS 112, mobile station update controller 305 may then transfer the contents of downloadable upgrade file 324 to MS 112 and update software revision number 323, as required. Thus, from the configuration request and response, the mobile station update controller is inherently informed of the capability of the mobile station, and will inherently be updated according to that capability) (see col. 8, lines 36-65).

Regarding claim 20, Moles discloses a method (see claim 16 rejection) wherein downloading comprises: setting a flag in the wireless communication device indicating availability of an update package for updating the wireless communication device during an over-the-air parameter administration operation changing number assignment module parameters (i.e., mobile station update controller 305 gathers initial configuration data (i.e., manufacturer identification code, hardware revision number, and software revision number) from MS 111-114 through MSC 140 and IWF 150 during the time that each handset is being provisioned or at a subsequent time. In either case, mobile station update controller 305 stores the initial configuration data for each handset MS 111-114 in the respective mobile station parameters file 320, 330, 340 and 350. Periodically, as determined by update schedule 313, mobile station update controller 305 may request a copy of the latest software revision for MS 111-114 from the manufacturer of each handset. Subsequently, mobile station update controller 305 stores the software received from the manufacturers, if any, in the appropriate downloadable upgrade file in mobile station parameters files 320, 330, 340 and 350) (see fig. 3, col. 6, lines 5-8, lines 28-39,

and line 66 to col. 7, line 35); sending a universal resource locator identifying at least one server to the wireless communication device during an over-the-air parameter administration operation changing number assignment module parameters (see fig. 3, col. 6, lines 5-8, lines 28-39, and line 66 to col. 7, line 35); and retrieving update information from the at least one server based upon the flag (see fig. 3, col. 6, lines 5-8, lines 28-39, and line 66 to col. 7, line 35, and col. 8, lines 49-59).

Regarding claim 21, Moles discloses a method (see claim 16 rejection) wherein determining comprises: receiving a general page message indicating one of a firmware update service option and a software update service option by the wireless communication device (i.e., in response to the mobile station configuration request, MS 112 transmits its manufacturer identification data, hardware revision number, and software revision number to mobile station update controller 305 through IWF 150 and Internet) (see col. 8, lines 36-40); verifying support of one of the firmware update service option and the software up-date service option by the wireless communication device (see fig. 4, col. 8, lines 29-40); and sending a response to a base station indicating support of one of firmware and software updates when the wireless communication device verifies support of one of the firmware update service option and the software update service option (see fig. 4, col. 8, lines 29-40).

Regarding claim 22, Moles discloses a method (see claim 16 rejection) wherein verifying further comprises: paging the wireless communication device for one of a firmware update service option number and a software update service option number (i.e., mobile station update controller transmits a mobile station configuration request message) (see fig. 4, col. 8, lines 27-59); comparing one of the firmware update service option number and the software update

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service option number received on one of a stored firmware update service option number and a stored software update service option number in the wireless communication device, to determine a match by the wireless communication device (i.e., Subsequently, mobile station update controller 305 examines manufacturer identification codes in mobile station parameters files 320, 330, 340 and 350 for a match with the indicated manufacturer identification code. If mobile station update controller 305 determines that the manufacturer identification code in a particular mobile station parameter file matches the required manufacturer identification code, mobile station update controller 305 transfers the indicated subscriber alert message to the associated mobile station, MS 112 for example, through Internet 165) (see col. 8, lines 4-13); responding to the paging, if a match occurs, wherein responding to the paging comprises indicating that the wireless communication device is associated with one of the firmware update service option number and the software update service option number (see fig. 4, col. 8, lines 29-40); and responding to the paging indicating a negative match if a match does not occur (see figs 3-4, col. 8, lines 4-13, 29-65).

Regarding claim 23, Moles discloses a method (see claim 16 rejection) wherein the electronic device comprises at least one of a plurality of mobile electronic devices (see fig. 1, and col. 5, lines 1-5), and wherein the plurality of mobile electronic devices comprise at least one of a mobile cellular phone handset, personal digital assistant, pager, M23 player, and a digital camera (see fig. 1, and col. 5, lines 1-5).

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is (571) 272-7799. The examiner can normally be reached on Monday-Friday 8:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Pierre-Louis Desir  
06/18/2006

**JEAN GELIN  
PRIMARY EXAMINER**

